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(54) **ROUTE PLANNER WITH AREA AVOIDANCE CAPABILITY**

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(57) **ABSTRACT**

A method for establishing a path from a launch point to a destination point that can include multiple way points while avoiding landmass areas. Launch points and destination points can lie outside or inside the particular landmass areas. The method includes steps for defining tangents path areas to be avoided, extending those tangents to define way points and testing the individual way points to assure conformance to various conditions and constraints. A subset of paths are optimized. The shortest of the optimized paths becomes a final path.

32 Claims, 20 Drawing Sheets

